

REMARKS

Claims 10-18 are pending in this application. By this Amendment, claims 10 and 15 are amended to further distinguish from Fischer (DE 10005555 A1). Support for the amendments to claims 10 and 15 may be found in the original specification at, for example, page 8, lines 15-21 and Fig. 10. Claims 11-14 and 16-18 are amended to address informalities. The Abstract is amended to address informalities. No new matter is added.

In view of the foregoing amendments and the following remarks, reconsideration and allowance of claims 10-18 are respectfully requested.

The courtesies extended to Applicant's representative by Examiners Parendo and Lee at the interview held July 2, 2009, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below, which constitute Applicant's record of the interview.

Objection To The Drawings

The drawings were objected to for allegedly not showing all of the features of the claims. In particular, the Patent Office alleged that the features of claims 17 and 18 are not shown in the drawings. Applicant respectfully traverses this objection.

Figs. 11-13 of the specification show steps of the method of the claims prior to the deposition of the sealing layer (second layer). See page 5, lines 25-30 of the specification. As discussed during the interview, Fig. 11 shows, for example, a first layer 4, a third layer comprised of a first mechanically tensile-stressed sub-layer 9a and a second mechanically compressive-stressed sub-layer 9b. Thus, all of the layers of claim 17 except the second layer are shown in Fig. 11. However, the second layer is clearly shown in Fig. 10. Thus, all of the features of claim 17 are clearly shown in the drawing figures.

Regarding claim 18, Fig. 13 shows, for example, a first layer 4, a third layer 9 and a fourth layer 13. Thus, the drawing figures clearly show all of the features of claim 18.

In view of the above, withdrawal of the objection is respectfully requested.

Objection To The Specification

The Abstract of the specification was objected to for reciting the phrase "comprising."

Applicant respectfully traverses this objection.

The Abstract has been amended in accordance with the Patent Office's suggestion to recite "includes" rather than "comprising."

In view of the above, withdrawal of the objection is respectfully requested.

Claim Objections

Claims 10-18 were objected to for informalities. Applicant respectfully traverses these objections.

Claim 15 was objected to for reciting "according to claim 10." Claim 15 is amended to eliminate the phrase "according to claim 10."

Claims 10-18 were objected to for containing the phrase "Microcomponent" or "Method" at the beginning of each claim. Claims 10-18 are amended to recite "A" or "The" at the beginning of each claim to provide proper antecedent support.

Claims 10 and 15 were objected to for reciting "the direction." Claims 10 and 15 are each amended to recite "a direction" to provide proper antecedent support.

Claim 12 was objected to for reciting "the highest part." Claim 12 is amended to recite "a highest part" to provide proper antecedent support.

Claim 17 was objected to for reciting "formed by." Claim 17 is amended to recite "comprising" to obviate the objection.

In view of the above, withdrawal of the objections is respectfully requested.

35 U.S.C. §112 Rejection

Claims 15-18 were rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. Applicant respectfully traverses this rejection.

Claim 15 is amended to eliminate the phrase "successively comprising" and recite "the method comprising" as recommended by the Patent Office. Claim 15 is thus clear.

Withdrawal of the rejection is respectfully requested.

35 U.S.C. §103(a) Rejection

Claims 10-16

Claims 10-16 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over Fischer. Applicant respectfully traverses this rejection.

Amended claim 10 requires, among other features, at least one mechanically tensile-stressed layer arranged above the first layer, the at least one mechanically tensile-stressed layer being different from the first layer and the second layer and, the at least one mechanically tensile-stressed layer being capable of flexing in a direction of the first layer and thereby reducing a space to be sealed by the second layer. Fischer does not render obvious at least these features of claim 10.

Fischer describes a top layer 10 (allegedly equivalent to the first layer of claim 10), a catch layer 17 (allegedly equivalent to the second layer of claim 10) and an upper top layer 14 (allegedly equivalent to the third layer of claim 10). Fischer describes that top layer 10 is under intrinsic tension. See page 2 of the English translation of Fischer. However, Fischer does not describe or provide any reason or rationale that upper top layer 14 would have been under intrinsic tension. Thus, one of ordinary skill in the art would have understood that upper top layer 14 is not under intrinsic tension. In other words, Fischer describes only that top layer 10 is under intrinsic tension.

Fischer shows in Figs. 1c-1g that layers 10 and 14 keep their initial form. Fischer does not describe, or provide any reason or rationale for one of ordinary skill in the art to have come to, the upper top layer 14 being capable of flexing in a direction of the top layer 10 to reduce a space to be sealed. Further, even if the top layer 10 were to have flexed, as alleged

by the Patent Office, it is not certain that upper top layer 14 would flex in a manner similar to top layer 10 because upper top layer 14 is not under the same stress.

Fischer is thus very different from the microcomponent of claim 10. Claim 10 requires that the at least one mechanically tensile-stressed layer be arranged above the first layer, and that the mechanically tensile-stressed layer be different from the first layer and the second layer. Contrary to claim 10, Fischer requires top layer 10 (the "first layer") to be tensile-stressed and that the upper top layer 14 (the "third layer") not to be tensile stressed. Thus, Fischer does not describe at least one mechanically tensile-stressed layer arranged above the first layer, wherein the at least one mechanically tensile-stressed layer is different from the first layer and the second layer.

Similar to claim 10, claim 15 requires deposition of at least one mechanically tensile-stressed layer, after deposition of the first layer, the at least one mechanically tensile-stressed layer being different from the first layer and the second layer. For at least the reasons presented above regarding claim 10, Fischer also does not render claim 15 obvious.

Claims 11-14 depend from claim 10 and claim 16 depends from claim 15. For at least their respective dependency, and for the additional features recited, Fischer also does not render obvious claims 11-14 and 16.

In view of the above, withdrawal of the rejection is respectfully requested.

Claim 17

Claim 17 was rejected under 35 U.S.C. §103(a) as allegedly being obvious over Fischer in view of Wang (U.S. Patent No. 6,667,189). Applicant respectfully traverses this rejection.

The Patent Office alleges that Fischer describes all of the features of claim 17 except that the third layer comprises a first mechanically tensile-stressed sub-layer covered by a

second mechanically compressive-stressed sub-layer. The Patent Office introduces Wang as allegedly remedying the deficiencies of Fischer in this regard.

Wang does not remedy the deficiencies of Fischer. Wang describes a silicon condenser microphone. Wang describes a diaphragm 58 having a compressive phosphosilicate glass layer 60 deposited above the diaphragm 58. The glass layer 60 causes buckling of the diaphragm during the wet release step. Wang describes that a protective layer 62 is deposited above the compressive layer 60. See col. 7, lines 22-41 of Wang.

However, Wang does not describe or provide any reason or rationale for one of ordinary skill in the art to have come to at least one mechanically tensile-stressed layer arranged above the first layer, wherein the at least one mechanically tensile-stressed layer is different from the first layer and the second layer, as required by claim 15. Thus, Wang does not remedy the deficiencies of Fischer.

In view of the above, withdrawal of the rejection is respectfully requested.

Claim 18

Claim 18 was rejected under 35 U.S.C. §103(a) as allegedly being obvious over Fischer in view of Ouellet (U.S. Patent Application Publication No. 2003/0217915). Applicant respectfully traverses this rejection.

The Patent Office alleges that Fischer describes all of the features of claim 18 except after the sacrificial layers have been removed, a mechanically tensile-stressed fourth layer is deposited on the third layer, so that the third layer and fourth layer each flex in the direction of the first layer. The Patent Office introduces Ouellet as allegedly remedying the deficiencies of Fischer in this regard.

Ouellet does not remedy the deficiencies of Fischer. Ouellet describes the fabrication of microstructures with a vacuum-sealed cavity. See the Abstract of Ouellet. Ouellet describes a capping layer of an aluminum alloy and an upper sealing and stiffening layer of titanium

nitride that is arranged above the capping layer. Ouellet describes that the upper sealing layer is under tensile stress to prevent the buckling of the titanium nitride layer that is normally under compressive stress. See paragraphs [0122] and [0146] of Ouellet.

However, Ouellet does not describe or provide any reason or rationale for one of ordinary skill in the art to have come to at least one mechanically tensile-stressed layer arranged above the first layer, wherein the at least one mechanically tensile-stressed layer is different from the first layer and the second layer, as required by claim 15. Thus, Ouellet does not remedy the deficiencies of Fischer.

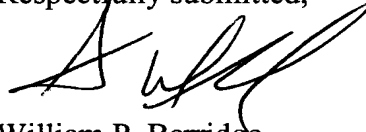
In view of the above, withdrawal of the rejection is respectfully requested.

Concluding Remarks

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 10-18 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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